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Synergent Technologies

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5301 Buckeystown Pike
Suite 306
Frederick, MD 21704

12 January 2003

Ms Marlene H Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Written ~~Ex~~ Parte Presentation in **ET** Docket 98-153

Dear Ms. Dortch:

I **am** providing the following comments in support of the Petition for Reconsideration submitted by Multispectral Solutions, Inc. ("MSSI") in the above referenced docket

I **am** the author of Agilent Technologies' application note entitled "Radar Pulse Measurements with a Spectrum Analyzer". This document is referenced in Agilent Measurement Solutions - **Issue 1**, Volume 3¹ to assist Agilent customers in the proper use of a spectrum analyzer to measure wideband pulse parameters. Please note that Agilent now refers its customers to this document to better understand the phenomenon of pulse desensitization. The predecessor document, **HP** Application Note **150-2** "Spectrum Analysis of Pulsed RF", is no longer in print but is currently scheduled for revision. I **am** working with Agilent to update the entire 150 series of application notes.

Also, I was the co-author of three one-day seminars presented by Agilent: 'Radar Measurement Basics', 'Advanced **Radar** Measurements', and 'Digital Communication Measurements'. Each of the seminars has been delivered at over **35** cities worldwide. I have personally delivered each of the seminars twenty times to over 1000 engineers.

As an expert in the field of spectrum analysis and wideband measurements with over **25** years of experience, 20 years with HP/Agilent in the development of test equipment and procedures for wideband signals, I believe that I **am** eminently qualified to comment on the correct use of pulse desensitization correction (PDC)

Specifically, I agree with the argument made by Multispectral Solutions, Inc. (MSSI) in its Petition for Reconsideration that PDC is **not** required to determine the potential interference effects of a wideband pulse waveform. Rather, pulse power *density* (i.e.,

¹ http://www.tminl.agilent.com/npl/tandm_news.shtml

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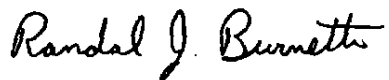
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interference effects of a wideband pulse waveform. Rather, pulse power *density* (i.e., Watts per Hz, dBm/MHz, etc.), whether determined on an average or peak basis, is the relevant parameter of importance.

Respectfully submitted,



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